

Please delete the Abstract and substitute the following Abstract.

#### Abstract

A method of characterizing surface structures using a chemically curable impression material to take an impression of at least one site of the undamaged surface of an article and of a surface of an article damaged by mechanical and/or chemical exposure and/or by exposure to radiation and/or heat, and/or of a surface of a test specimen mounted on the surface of an article, said test specimen surface being damaged by mechanical and/or chemical exposure and/or by exposure to radiation and/or heat, curing the impression material to produce a negative of the damage pattern, and using image analysis to determine the extent of the surface structures and/or the extent of the surface damage within the damage pattern on the basis of light-microscope pictures of the negative. Use of the method for the preparation, modification and/or development of new and/or existing materials.